1. An overview of the long distance market

Competition in the long distance industry is a proven success story of this agency's policies. As a result of FCC initiatives, fostered thereafter by the Bell System divestiture and subsequently, the 1996 Act, long distance telecommunications services have enjoyed explosive growth. These services have been characterized by increasing supply, dramatic rates of innovation, ever-increasing demand, and constantly declining prices.

This trend promises to continue. Rates for residential long distance calling plans have steadily fallen, from ten cents per minute two years ago to, more recently, seven, five, and three cents per minute.³¹ As confirmed by Doctors Beard and Mayo in the recent New York Section 271 proceeding, the long distance market is fully competitive, as demonstrated by the fact that AT&T's market share has decreased steadily post-divestiture at the same time that the real price of long distance services has declined over 70%. Beard/Mayo Decl., Attachment 3, ¶ 12. Rate decreases can be attributed, inter alia, to declining costs,³² the pass-through of reduced access charges³³ and ever increasing competition for the long distance dollar.³⁴ At the same time,

For example, AT&T offers a 7 cents plan; MCI WorldCom, a 5 Cents Everyday plan; Sprint, a Nickel Nights plan; and Excel, the number four long distance provider, has a Three-Penny Plan. See AT&T Web Site <www.catalog.att.com/cmd/>; MCI WorldCom Web Site <webselook = webgold1 mci.com/5cents/>; Sprint Web Site <csg.sprint.com/longdistance/nickelnights/index.html>; Excel Web Site <www.excel.com/publicpages/hotnews/3cents102099.html>. Dial-around providers have lowered prices as well. See, e.g., WorldXChange Web Site <www.worldxchange.com> (five cents per minute for first 60 days; seven cents thereafter; no monthly fee). The effective price per minute has also declined.

See, e.g., W.K. Viscusi, et al., Economics of Regulation and Antitrust 496 (MIT 1995) (once investment in a network is sunk, "the marginal cost of operation is relatively low"); Telegeography 1999 at 20 (Gregory C. Staple, ed., 1998) ("The per minute cost of carrying a voice call on [new trans-oceanic submarine] cables is minuscule.").

While the BOCs will no doubt trot out their shopworn arguments that the long distance

according to market analysts, "the trend is toward bundling 'free' long distance with other services such as local or wireless..." This pattern will likely expand as wireless services, Internet telephony, data transmission and broadband services continue to grow and the line between voice and data continues to blur. See Patel Aff. ¶¶ 7, 11-19.

The last decade has also been characterized by a flurry of long distance mergers and acquisitions resulting in increased consolidation, for example:

- AT&T-Alascom (1995)
- Frontier-Allnet Communications (1995)-American Sharecom (1995)-Schneider Communications (1995)-West Coast Communications (1995)

carriers are not passing through access charges, Chairman Kennard testified earlier this year before Congress that between 1992 and 1997, long distance rates fell by 24% or, in absolute terms, twice the amount of access charge reductions. "A New FCC for the 21st Century," Chart 4 (LD Consumer Prices and Access Costs Are Falling) (Mar. 17, 1999).

For an in-depth calculation of access charge flow-through, see Drs. R. Carter Hill and T. Randolph Beard, "A Statistical Analysis of the Flow-Through of Reductions in Switched Access Charges to Residential Long Distance Rates" (May 24, 1999)

www.egroupassociates.com/download.htm>.

- See, e.g., Remarks by William E. Kennard, Chairman, FCC, before the <u>FCC-FTC Truth-in-Advertising Public Forum</u>, Washington, D.C., at 2 (Nov. 4, 1999) ("TIA Remarks") ("Instead of having little or no choice in long-distance, consumers now have scores of options, with some companies offering package deals at competitive rates and others boasting everything from low-cost calling cards to inexpensive dial-around plans.").
- Industry Report, CIBC World Markets Corp., "Telecom Services: Strong Volume Growth in 2Q99," LEXIS, TFN Investext, Report No. 2917251, at *13 (Aug. 4, 1999) ("TFN Industry Report"); see also Wall Street Journal, Nick Wingfield, "Priceline.com Plans to Let Customers Bid for Long-Distance Phone Service" at B6 (Nov. 8, 1999) (quoting industry consultant: "... we are rapidly moving to the point where long distance will be given away"); AT&T Corp., British Telecommunications for Grant of Section 214

 Authority, IB Dkt. No. 98-212, Memorandum Opinion and Order ¶ 37 (DA 99-313) (rel. Oct. 29, 1999) ("AT&T/BT Order") (Level 3 plans to provide "innovative bandwidth package to corporate customers that includes free voice services"); Business Week, Steven V. Brull, "Why Talk is So Cheap" at 34 (Sept. 13, 1999) (as competitors vie with each other to sign consumers up for bundled offerings, "long distance may be thrown in for no extra charge").

- Excel-Telco Holdings (1997)-Teleglobe (1998)
- LCI International-USLD Communications (1997)-Qwest (1998)

This spate of recent activity appears to be in response to the Act's "procompetitive, deregulatory national policy framework," as companies engage in a land grab . . . to acquire all of the assets necessary to compete in a deregulated world. Morgan Stanley Dean Witter,

"Telecommunication Services, U.S. Wireline, Third Quarter Preview" at 1 (Oct. 15, 1999).

Indeed, since 1990, two of the then-largest four providers of long distance have merged twice, resulting in increased consolidation and increased competition. In 1990, number two MCI acquired then-number four Telecom*USA, Inc. See Applications of Telecom*USA, Inc. and MCI Communications Corp. for Consent to Transfer Control, 5 FCC Rcd. 4857 (1990) ("MCI/Telecom*USA Order"). The Commission approved the transaction, correctly predicting that it would "result in more vigorous competition with AT&T and other interexchange carriers." Id. ¶ 12.37 Last year, then-number four WorldCom merged with number two MCI. The Commission (again correctly) concluded that the procompetitive benefits of the union far outweighed any alleged anticompetitive benefits. See Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control, 13 FCC Rcd. 18025 (1998) ("WorldCom/MCI Order").

H.R. Rep. No. 104-458 at 1; Preamble to Pub. L. No. 104-104, 110 Stat. 56 (1996).

Interestingly, even though concentration (as measured by HHI) in the long distance market was higher in 1990, and even though the merger involved the number two and four providers, not a single opposition was filed. See MCI/Telecom*USA Order ¶ 6 & n.9 (Ameritech filed, but then withdrew, "comments neither favoring nor opposing" the merger); Trends Report, Tables 11.3 & 11.4 (measuring HHI trends from 1984 to 1998).

Indeed, the Commission's conclusion that horizontal mergers among long distance companies would result in increased competition is borne out by the fact that the long distance market has been and continues to be robustly competitive:

[As of last year] over 600 carriers provide[d] long distance services. At least 20 of these carriers had annual revenues exceeding \$100 million in 1997, and eight carriers [AT&T, MCI, Sprint, WorldCom, Excel, Frontier, LCI, and Cable & Wireless] had annual revenues exceeding \$1 billion. Moreover, as a group, carriers other than the four largest long distance carriers have demonstrated annual growth rates exceeding 40 percent.

WorldCom/MCI Order ¶ 40 (emphasis added) (citations omitted).³⁸ And as Chairman Kennard testified before Congress only a few months ago:

In the long-distance arena, the marketplace is competitive and robust. By the end of 1997, there were over 600 long-distance providers competing for customers. As a result, the price of an interstate long-distance as well as an international call has steadily dropped, enabling more and more Americans to use these services. In fact, almost 30 billion more minutes in long-distance and international calls were made from 1996 to 1997.³⁹

The observable consolidation among long distance firms has been accompanied by substantial new entry, where the fastest growth rates can be observed. See discussion infra Section II.D.3. Between 1996 and 1998, the number of companies building their own national fiber networks has grown from 11 to 15. See Fiber Deployment Update, End of Year 1998,

See also id. at 18044; Global Crossing Ltd. and Frontier Corp Applications for Transfer of Control, CC Dkt. No. 99-264, 1999 FCC LEXIS 4621, ¶ 18 (DA 99-1930) (rel. Sept. 21, 1999) ("we have found that the number of facilities-based domestic long distance providers is increasing"). Its confidence in the marketplace led the Commission to deregulate long distance service providers several years ago. Policy and Rules Concerning the Interstate, Interexchange Marketplace, 11 FCC Rcd. 20730 (1996); id., 14 FCC Rcd. 6004 (1999); Motion of AT&T Corp. to be Reclassified a Non-Dominant Carrier, 11 FCC Rcd. 3271 (1995) ("AT&T Non-Dominant Order").

Kennard May 26, 1999 Testimony at *5-*6; see also TIA Remarks at 2.

Table 1 (Sept. 1999) ("Fiber Report"). The Commission concluded over four years ago that sufficient excess capacity existed in the long distance industry to constrain competitors' pricing behavior. AT&T Non-Dominant Order ¶ 58. In the past two to three years, the deployment of new capacity has soared, with the growth of U.S. fiber capacity now estimated to increase at an astonishing rate of 30% annually. See Fiber Report, Table 1. Industry analysts have further confirmed the competitiveness of the long distance market, which has consistently exhibited productivity improvements and declining prices. 40

Anticipated changes in the near future will extend this trend. Entry by the RBOCs, which are already providing in-region intraLATA toll and out-of-region interLATA toll, will have an immediate and substantial effect on long distance market shares once Section 271 relief is granted. No evaluation of the state of competition of long distance services at the time this merger will close can be accurate unless it accounts for this fundamental change. Traditional antitrust analysis requires consideration of new entry that is "timely, likely and sufficient in its magnitude, character and scope." DOJ Merger Guidelines § 3.0. Entry that can be achieved within two years is assessed to be sufficiently "timely" to be included. Id. § 3.2. Certainly, it is reasonable to assume that some, if not many, BOC applications will be granted by the time the 1996 Act has its fifth year anniversary.

The BOCs have predicted that they will capture substantial market share once allowed to compete for long distance customers. For example, in its recent filing for Section 271 authority in

See, e.g., Donaldson Lufkin & Jenrette, M.J. Geran, "Telecommunications (Long Distance) Industry," TFN Investext 3380289, at *1 (Feb. 16, 1999) ("The long distance industry is a very competitive, capital-intensive business. . .").

New York, Bell Atlantic estimates it will acquire 26% market share post-entry. 41 Other RBOCs have made similar predictions. SBC Communications posits it will gain a 10 to 15% share of the market within 18 months of entry. 42 Ameritech Michigan has estimated a share of 25 to 30% for Ameritech and a corresponding loss for AT&T, MCI WorldCom and Sprint. 43

The FCC has given credence to these predictions:

[G]iven the BOCs' strong brand recognition and other significant advantages from incumbency, advantages that will particularly redound in the broad-based provision of bundled local and long distance services, we expect that the BOCs will be formidable competitors in the long distance market and, in particular, in the market for bundled local and long distance services. * * * [R]ecent studies have predicted that AT&T's share of the long distance market may fall to 30 percent with BOC entry.

Application of Ameritech Michigan to Provide In-Region, InterLATA Services in Michigan, 12 FCC Rcd. 20543, ¶ 15 (1997). Market analysts, while slightly more conservative in their numbers, concur. A recent study by the Strategies Group indicates that "[o]nce RBOCs are permitted to offer long distance to their local customers, their revenue share is projected to increase five-fold over the next ten years to nearly \$55 billion, or 20 percent of the projected \$274 billion market." Of course, one need not guess at the advantages that owning the local

See MacAvoy Decl. at 26; see also <u>Telecommunications Reports</u>, "BOCs' Long Distance Desires Aren't Dampened by Price War" at 6 (Sept. 6, 1999) (Bell Atlantic executives estimate that it will capture 20% of the long distance market in-region within two years).

See Affidavit of Richard L. Schmalensee at 6, <u>Application of SBC Communications, Inc.</u> for Provision of In-Region, InterLATA Services in Oklahoma, CC Dkt. No. 97-121 (Apr. 7, 1997) ("Schmalensee Aff.").

See Joint Affidavit of Robert Crandall & Leonard Waverman at 46, Application of Ameritech Michigan to Provide In-Region, InterLATA Services in Michigan, CC Dkt. No. 97-137 (Dec. 27, 1996) ("Crandall/Waverman Aff.").

Cambridge Telecom Report, "The Strategis Group: RBOCs Ready to Strike at \$274 Billion Market," IAC Newsletter Database (June 14, 1999) (quoting Peter Nighswander,

monopoly brings to long distance; it can be seen in the fact that SNET had captured 20% of Connecticut customers' long distance by 1996, and 40% within the first three years of its entry; GTE, with a more dispersed footprint, as of July reportedly had gained three million subscribers, roughly 15-20% of its in-region customer base.⁴⁵

BOCs will enter the long distance markets not merely with some efficiencies, but with a vast array of incumbent legacies that will give them market advantages. Foremost among these are a continuing stranglehold on local services and the local exchange access facilities needed to originate and terminate long distance services. Regulators will have to be especially vigilant to discern advantages based on efficiency and those based simply on monopoly leveraging. Most especially, until long distance access charges are reformed to reflect their true economic costs, BOCs will enjoy tremendous strategic pricing leverage.

Vice President of Competitive Telephony practice); see also TFN Industry Report at *6 (analysts "continue to believe that the [RBOCs and GTE] have SG&A cost advantages because of their size, scale and strong brand names").

Telecommunications Reports, "BOCs' Long Distance Desires Aren't Dampened by Price War" at 6 (Sept. 6, 1999); GTE Company History (July 1999)

<www.gte.com/aboutGTE/organization/history/history13.html>. Moreover,
Bell Atlantic and GTE earlier this year attempted to attain a Section 271 interim "waiver" so that the combined entity would be able to retain GTE's interLATA voice and data customers. While that request was later withdrawn, it is not clear what relief the companies will seek in the future. See Letter from Steven G. Bradbury, Counsel for GTE, and Edward D. Young III, Counsel for Bell Atlantic, to Katherine Brown, FCC, of 4/14/99, at 1.

Cf. Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, 12 FCC Rcd. 15756, ¶ 96 (1997) (BOC interLATA affiliate may "gain significant market share upon entry or shortly thereafter, because of its brand identification with in-region customers, possible efficiencies of integration, and the BOC's ability potentially to raise the costs of its affiliate's interLATA rivals").

All of these trends, separately or taken as a whole, confirm that this merger will not harm consumers. Doctors Besen and Brenner find that:

The cumulative effect of these developments complicates any assessment of the state of competition in the provision of telecommunications services, but no accurate assessment can ignore these developments. It is clear that an accurate assessment of the state of competition cannot be based on the current reported shares of traditional telecommunications carriers. Only by accounting for the role of a growing number of telecommunications suppliers, the prospective entry of RBOCs into markets from which they had previously been excluded, the expanded role of integrators, and the provision of services using new technologies, can the effect of the merger of MCI WorldCom and Sprint be adequately assessed.

Besen/Brenner Decl. at 5.

2. The Commission's WorldCom/MCI Order

Last fall, the Commission analyzed the potential competitive effects on the long distance market of a horizontal merger between MCI and WorldCom. See generally WorldCom/MCI

Order ¶¶ 23-77 (domestic), ¶¶ 78-132 (international). Based on the record before it, the

Commission determined that two relevant submarkets within the retail domestic long distance market demanded examination: namely, the residential/small business market (or so-called "mass market") and the medium/large business market (or so-called "larger business market"). These same product markets were deemed relevant for the retail international long distance market. For purposes of this application, MCI WorldCom and Sprint utilize the same template, and thus provide below a description of the Commission's analysis in that order and its applicability to the instant transaction. 47

The Commission has found the mass market and larger business market segments to be relevant in a number of recent merger proceedings. See, e.g., BA/NYNEX ¶¶ 50-53; SBC/Ameritech Order ¶ 68; Applications for Consent to the Transfer of Control of Licenses from Southern New England Telecommunications Corp. To SBC Communications, Inc., 13 FCC Rcd. 21292, ¶ 16 (1998); Application of Teleport Communications Group, Inc. and AT&T Corp. For Consent to Transfer of Control, 13

Having defined the relevant markets, the order then assessed the ability of the merged entity to exercise power in each of these markets. As a first cut, the Commission examined raw concentration numbers. Recognizing that any merger between companies in the same market would in a sense increase concentration, the FCC correctly declined to rely on a static market analysis:

Although ... the merger will increase concentration in the short run, we disagree that anticompetitive effects are likely to result. Recent market trends indicate that the long distance market has become progressively less concentrated over the past decade. Moreover, the record indicates that there will be significant increases in the amount of long distance transmission capacity over the next two years. We further conclude that, once a carrier has access to this fiber capacity, any remaining barriers to deploying this capacity in the retail long distance market are low.

Id. ¶ 36 (citations omitted). Accordingly, "[i]t is well established that market share, by itself, is not the sole determining factor of whether a firm possesses market power. Other factors, such as demand and supply elasticities, conditions of entry and other market conditions, must be examined to determine whether a particular firm exercises market power in the relevant market." As discussed below, existing entrants have sufficient capacity to foreclose any possible concern for inappropriate pricing practices from rivals. Moreover, the FCC has found the market for long distance to be characterized by high demand elasticities. Id. ¶ 41. 49

FCC Rcd. 15236, ¶¶ 15-16 (1998).

AT&T Non-Dominant Order ¶ 68 (citations omitted); WorldCom/MCI Order ¶ 18 ("analysis of post-merger increases in concentration based on current market shares may well provide an insufficient predictor of the likelihood of the merger's potential effects on competition").

See also Motion of AT&T to be Declared Non-Dominant for International Service, 11 FCC Rcd. 17963, ¶ 42 (1996) ("AT&T International Non-Dominant Order") ("Demand elasticity . . . is the propensity of . . . customers to switch carriers or otherwise change the amount of services they purchase . . . in response to relative changes in price and quality.").

This approach is of course fully compatible with antitrust doctrine as well. The Merger Guidelines and case law utilized by the antitrust authorities make clear that market shares cannot tell the full story. The Guidelines expressly recognize that "recent or ongoing changes in the market may indicate that the current market share of a particular firm either understates or overstates the firm's future competitive significance." Merger Guidelines § 1.521;

WorldCom/MCI Order ¶ 17. Ease of entry is the principal factor identified:

A merger is not likely to create or enhance market power or to facilitate its exercise, if entry into the market is so easy that market participants, after the merger, either collectively or unilaterally could not profitably maintain a price increase above premerger levels.

Merger Guidelines § 3.0.

In the <u>WorldCom/MCI Order</u>, the Commission examined recent trends in the industry and ultimately concluded that those market features would more than constrain any attempt by the

See, e.g., United States v. General Dynamics Corp., 415 U.S. 486, 498 (1974) (market share is imperfect measure because market must be examined in light of access to alternative supplies); United States v. Baker Hughes Inc., 908 F.2d 981, 989 (D.C. Cir. 1990) (merger that would result in a combined market share of 76% and an increase in the HHI from 2878 to 4303 held lawful in light of specific market factors, including ease of entry and presence of additional potential competitors) (opinion by then-Judge Thomas with then-Judge Ruth B. Ginsburg on the panel); United States v. Syufy Enters., 903 F.2d 659, 664-67 (9th Cir. 1990); Ball Mem'l Hosp., Inc. v. Mutual Hosp. Ins., Inc., 784 F.2d 1325, 1335-36 (7th Cir. 1986); United States v. Waste Management, 743 F.2d 976 (2d Cir. 1984) (ease of entry, as demonstrated by recent entry, outweighed any concerns regarding increase of market share post-merger to 48%); Review of the Commission's Regulations Governing Television Broadcasting, 10 FCC Rcd. 3524, ¶¶ 21-23 (1995); Application of General Electric and MCI Communication Co. for Authority to Transfer Control of RCA Global Communication, 4 FCC Rcd. 8207, ¶ 12-15 (1989) (ease of entry precluded firm with 49.28% market share from successfully raising prices for any significant period of time). See generally Phillip E. Areeda, Herbert Hovenkamp, & John L. Solow, IIA Antitrust Law: An Analysis of Antitrust Principles and Their Application 83-302 (1995) (discussing various factors considered in assessing market power).

merged entity to act anticompetitively or against the public interest. See, e.g., WorldCom/MCI

Order ¶ 104. Following that order, the companies will focus primarily on recent trends in the
markets identified by the FCC, including recent entrants, increases in transmission capacity (fueled
in part by new entry and in part by new technologies), low barriers to entry, and the predicted
effects of RBOC entry. Any one of these factors render potential anticompetitive effects of the
merger implausible. Taken in concert, they ensure that the competitive environment will continue
to enhance consumer welfare.

3. Domestic long distance

Consistent with the Commission's order in MCI WorldCom, this section analyzes the merger's competitive effect on the domestic long distance market. First, it examines the product and geographic markets identified by the Commission in the WorldCom/MCI Order and elsewhere, including the segments for mass markets and larger businesses. The section also briefly discusses the availability of wholesale services.

The market for domestic long distance is robustly competitive. From 1987 to 1996 (the last year for which NECA data is available), FCC reports indicate that the total number of carriers with presubscribed lines has risen almost 180%, from 223 to 621. 4Q Report,

Table 2.1.51 During the same period, the total number of carriers with .05% or more of total presubscribed lines in the U.S. increased from 19 to 45.52 Id. Excluding LEC toll service revenues, the most recent FCC reports indicate that MCI WorldCom's share of the long distance

Besen and Brenner estimate approximately 1,000 carriers based on other data. Besen/Brenner Decl. at 28.

These carriers are labeled as "qualifying" carriers on Table 2.1. See 40 Report at 4.

market based on total operating revenues is 25.6% and that Sprint's share is 10.5%. <u>Trends</u>

Report, Table 11.3. Using the same measure, from 1984 to 1998, the HHI dropped over 5,500 points, from 8,155 to 2,641. <u>Id.</u> Concurrently, the Commission estimates that the share of all "other" long distance carriers grew 700% -- from under 3% of the market to almost 21%. <u>Id.</u>

When one includes LEC toll revenues, the FCC reports that the market shares are still lower, with MCI WorldCom having 23% of the market, and Sprint having 9.4%. <u>Id.</u>, Table. 11.4. Based on the same measure, the HHI has similarly decreased during the past fifteen years: dropping almost 2,600 points (from 4,734 to 2,148), while, according to the FCC, the shares of all other long distance companies grew 835%, from 2% of the market to almost 19%. <u>Id.</u> This is not surprising when one considers that, in 1998, no fewer than twenty-eight long distance service providers earned more than \$100 million total operating revenues. <u>Id.</u>, Table 11.2.⁵³

Capacity. Doctors Besen and Brenner find that "[t]he enormous and continuing growth of long distance transmission capacity in the hands of emerging carriers is perhaps the most critical factor in the changing environment in which the merged MCI WorldCom-Sprint will compete."

Besen/Brenner Decl. at 25. Such capacity has dramatically increased in the last few years. See

Fiber Report at 9. The FCC reports that "[b]y year-end 1998, IXCs had deployed fiber networks exceeding 150,000 route miles, and we estimate their fiber mileage increased by more than 30%

The twenty-eight include: AT&T, MCI WorldCom, Sprint, Qwest, Teleglobe, Williams, Frontier, Cable & Wireless, Vartec, IXC, GTE, Star, PT-1 (now merged into Star), Pacific Gateway Exchange, RSL, Tel-Sav, Telegroup, Intermedia, WorldXChange, Business Telecom, Unidial, Primus, General, SNET, Nos, Total-Tel, Working Assets, and ITC^Deltacom. See Trends Report, Table 11.2. Total operating revenues includes annual interstate and intrastate revenues. Id. at 11-2.

over previous levels." Id. 54 Such growth is part of a continuing trend. Between 1996 and 1998, for example, long distance carriers' fiber system route miles increased almost 50%, from 106,205 to 159,779. See id., Table 1. Total fiber mileage deployed was estimated at more than 3.6 million miles. Id. at 9-10. The Commission further "expect[s] that total long-haul fiber is considerably larger [than 3.6 million miles] if [one takes] into consideration electric utility entities marketing SONET capacity . . . and entities that did not provide data." Id. at 10.

Moreover, these estimates of fiber assume the minimum widely used single wavelength data rate and thus do not include boosted capacity due to technology advances, including single wavelength terminal and repeater technology as well as new technologies such as wavelength division multiplexing ("WDM") and dense WDM ("DWDM"). <u>Id.</u> These new technologies "will vastly increase the transmission capacity of existing and new fiber networks." <u>WorldCom/MCI Order</u> ¶ 64. For example, WDM "multipl[ies] the potential capacity of each fiber by filling it with not just one but many wavelengths of light, each capable of carrying a separate signal." As a result, rather than having to lay expensive new cables, carriers can "simply pump additional wavelengths through existing fibers." WDM Review at 2. "Dense" WDM involves "slic[ing] the spectrum even more finely to squeeze 16 wavelength channels through a single fiber." <u>Id.</u> at 4. Since then, spectrum has been sliced even more thinly, into 32 and 40 channels. <u>Id.</u> at 5. At least one manufacturer is developing a 128-channel version. <u>Id.</u> Indeed, "[a]nalysts estimate that these

The Commission believed that 30% underestimated growth because carriers that did not report data for 1998 were assumed to have zero growth. Fiber Report at 2. At the same time, the Commission reported that certain market practices made it "more difficult to assure that double counting had not occurred" in calculating this estimate. Id. at 9.

See <u>Technology</u>, Jeff Hecht, "Wavelength Division Multiplexing" at 2 (Mar./Apr. 1999) www.techreview.com/articles/ma99/hecht.htm ("WDM Review").

new network technologies will allow a 100-fold increase in U.S. fiber backbone capacity between 1997 and 2000." WorldCom/MCI Order ¶ 64 (citation omitted). 56

Finally, the vast majority of this fiber appears to be deployed, but not yet lit. For example, AT&T reports that only 50% of its fiber is lit. Fiber Report, Table 3. Frontier reports 8% of it fiber miles are lit; NEON Inc. reports 5%; Qwest, 2%; and Williams, 1%. Id. 57 Further, these figures do not take into account the amount of sunk, but empty, conduit, awaiting future fiber deployment. 58 As discussed by Drs. Besen and Brenner, there are important implications of this capacity growth for purposes of competitive analysis. These carriers will "attempt to utilize as fully as possible the capacity in which they have invested. [These] carriers have an incentive to seek to serve residential as well as business traffic since residential traffic is heaviest during times that are off-peak for business traffic." Besen/Brenner Decl. at 18.

The amount of available capacity was key to the Commission's decision in the WorldCom/MCI Order. Based on the capacity of four new entrants -- Qwest, IXC, Williams, and Level 3 -- the Commission concluded "that the increase in transmission capacity provided by

See also BBC News, "Sci/Tech Optic Fibre World Records Broken" (Nov. 12, 1999) <news.bbc.co.uk/hi/english/sci/tech/newsid_517000/517733.stm> (indicating that scientists have broken two world records in the use of fiber optics to transmit information, including "cramm[ing] 160 billion bits (gigabits) per second down 300 kilometres of optical fibre using only one wavelength" and "us[ing] 1,022 different colours of light to send simultaneous signals down a single optic fibre").

Several carriers elected not to respond to this question. Fiber Report at 3 & Table 3.

See, e.g., Wired, David Diamond, "Building the Future-Proof Telco" at 179 (May 1998) (noting that Qwest is laying two conduits nationwide: "an orange one containing 48 of the company's own fiber-optic cables . . . as well as 48 for other carriers. The second conduit is black and empty. It's there for future use. 'Ten years from now . . . we simply pull another cable or two without having to dig up the ground,' says [Qwest CEO Joseph] Nacchio.") <www.wired.com/archive/6.05/qwest_pr.html>.

the[se] ... new facilities-based firms should mitigate any increase in concentration resulting from the merger." Id. ¶ 29, 45-49. Under that analysis, it is instructive to take a look at what has happened since the WorldCom/MCI Order and where those four carriers are today:

- Qwest. Last fall, Qwest was in the midst of constructing an 18,500 route mile fiber network. In September of this year, Qwest announced that it had completed construction of that network, which connects 150 cities across the United States. These cities represent nearly 80% of the data and voice traffic originated in the United States.

 WorldCom/MCI Order ¶ 45. Additionally, Qwest's acquisition of LCI has made the company competitive in the retail market, providing an immediate 2 million customer base.

 Id. Finally, Qwest is currently seeking regulatory approval of its merger with U S West.
- IXC. In 1998, IXC had deployed 10,500 route miles of fiber. Id. ¶ 47. Since then, IXC has deployed an additional 3,300 fiber miles, and plans to complete construction of 18,000 route miles by the end of next year. This fiber network connects 62 of the top 100 MSAs, and will connect 99 of the top 100 MSAs by the year 2000. IXC provides both wholesale and retail long distance services and has or will have POPs in LATAs that include 61% of the U.S. population. Id. Further, IXC just received approval for its merger with Cincinnati Bell Inc. That merger was designed to create an integrated communications company capable of serving customers nationwide. See Application Exhibit 1, Public Interest Statement at 1, Transfer of Control of Licenses of IXC to Cincinnati Bell, File No. 9714127 (Aug. 4, 1999).
- Williams Communications. As of last year, the FCC noted that Williams "plan[ned] to have 20,000 route miles of its 32,000 mile network activated by the end of 1999."
 WorldCom/MCI Order ¶ 48 (citation omitted). Williams' network currently has 22,400 route miles, 19,500 of which are in service. Williams plans to have over 33,000 route miles, connecting 125 U.S. cities, completed by next year. Williams offers wholesale long distance services on its network.⁶¹
- Level 3 Communications, Inc. In the WorldCom/MCI Order, the Commission noted that Level 3 planned to deploy a 15,000 route mile fiber IP network, with 25 U.S. cities being

Owest Press Release, "Qwest Communications Completes 18,500 Mile Nationwide Network and Shifts Construction to 25 Local Fiber Networks" (Sept. 13, 1999) www.qwest.com/press/story.asp?id=49.

IXC Communications Company Facts and Highlights, "Network Information" (Oct. 22, 1999) <www.ixc-comm.com/corporate/investors/factsnetwork.htm>.

Williams Communications Network Overview (Nov. 10, 1999) <www.williams communications.com/network/index.html>.

connected by early 2001. <u>Id.</u> ¶ 49. Today, Level 3 reports that it has completed deployment of 6,000 inter-city route miles, and another 7,000 miles are currently under construction. Since the <u>WorldCom/MCI Order</u>, the number of markets in which Level 3 is able to offer service over its own fiber networks has grown from zero (fourth quarter 1998) to 17 today. ⁶² Level 3's network will be linked with its local loops in 70 business centers on three continents, giving Level 3 the ability to offer end-to-end connectivity. ⁶³ Level 3 continues to lease capacity from Frontier, allowing Level 3 to build up its customer base for IP voice and data services while it continues to construct its own facilities. <u>Id.</u>

Moreover, a number of other companies have further deployed or are in the process of deploying significant nationwide fiber facilities since the Commission's ruling in the WorldCom/MCI proceeding. For example:

- Cable & Wireless reports that it is investing \$670 million in the U.S. to construct a high capacity Internet network that will fully integrate Internet, data, voice and messaging communications. During the next two years, Cable & Wireless will link more than 60 metropolitan areas in the country through this network. The company also plans to double its network capacity by deploying a multiple OC-48 nationwide by early next year as a first step in a nationwide network expansion to OC-192.
- Global Crossing has increased its domestic capacity by 500% since January 1999. Its core North American Crossing network (formerly Frontier's network) "will span 20,000 miles and connect more than 120 of the country's top markets." Before its acquisition, Frontier's Vice President of IP architecture and engineering is quoted as saying that the

Level 3 Communications, "Building the Network: Build-Out Progress" (Oct. 22, 1999) www.level3.com/content/1,1233.us/network/buildoutprogress,00.html>.

[&]quot;Wiring the World - Level 3 CEO Jim Crowe Is Taking A Big Gamble By Laying Fiber Optic Lines Around the Globe" at 1 (June 14, 1999) <www.level3.com/Content/1,1233,us|news|_barrons,00.html>.

Cable & Wireless Press Release "Cable & Wireless to Build Next Generation, High Capacity Internet Network" (Apr. 13, 1999) <www.cwusa.net/press_04-13-99.htm>.

Cable & Wireless Press Release "Cable & Wireless Pushes Internet Speeds to New Level with Deployment of OC-48 in the United States" (Sept. 14, 1999) www.cwusa.net/press_09-16-99.htm.

Global Crossing Press Release, "Global Crossing Christens North American Crossing Network" (Oct. 6, 1999) <www.globalcrossing.com/pressreleases/pr_100699b.htm>.

company's "IP backbone is designed to be highly scalable, allowing us to make significant increases in capacity, quickly and at a minimal cost." 67

• Teleglobe. In May 1999, Teleglobe announced that it would invest \$5 billion over the next five years constructing its GlobeSystem, an integrated Internet, voice, data and video network. It will allow direct network access from 160 major cities worldwide, and will increase Teleglobe's network capacity by more than 180-fold. In North America, Teleglobe operates a 161,000 DS-3 mile fiber optic network and "is deploying fiber powered by '160-wavelength electronics' in the Northeast, linking New York, Toronto, Montreal and other major markets." It has deployed fiber cable capacity linking the northwest U.S. with Canada and is upgrading its North American Internet backbone network to OC-192 by the fourth quarter of this year. The company serves more than 150 carrier customers in Canada and the United States, more than 50 content providers and over 60,000 business customers.

In addition, since the <u>WorldCom/MCI Order</u>, other telecommunications companies have begun to roll-out both wireline and wireless local facilities interconnected with inter-city links nationwide:

• NEXTLINK recently "contracted to have a 16,000-mile, IP-centric, inter-city fiber network built covering over 50 cities in the U.S. and Canada," with an estimated project completion date at the end of 2001. This network will provide backbone capacity enabling the company to "transport more than 40 times the current U.S. long distance traffic." The company expects to link 60 of the largest U.S. markets with a fiber optic

Global Crossing Press Release, "Frontier Global Center to Complete First OC-48 Cross-Country Native IP Ring" (May 10, 1999) https://www.globalcrossing.com/pressreleases/frontier/prfr%5F051099b.htm.

Excel Communications Press Release, "Teleglobe Announces Globe SystemTM: World's First Globally-Integrated Internet, Voice, Data and Video Network" (May 10, 1999) www.excel.com/publicpages/hotnews/globesys051099.html>.

Teleglobe Press Release, "Teleglobe Expands North American Fiber Network Linking Access Sites in Canada and the United States" at 2 (Aug. 2, 1999) www.teleglobe.com>.

NEXTLINK Press Release, "Nextlink Turns on Detroit, Houston and San Francisco Networks; Continues to Aggressively Launch High-Capacity Broadband Networks Across the United States" at 2 (Sept. 1, 1999) <www.nextlink.com/ra/news/archive/press/xpr_corp090199_new_market_wrap.html>.

NEXTLINK 1998 Annual Report at 5.

network by the end of 2000 that will enable the company to sell local, long distance and high speed computer data transmission services.⁷²

• Winstar is using dark fiber obtained from Metromedia Fiber Network ("MFN") and Williams to build broadband networks in and between a number of the major U.S. markets.⁷³ Through these agreements, Winstar's long-haul fiber network, which supports IP, ATM, and Frame Relay, "will extend more than 16,000 route miles and cover all of the top 60 U.S. markets." Winstar's intracity fiber network will extend nearly 6,000 route miles in 50 domestic and 12 international markets." Winstar 1999 PR at 2-3.

Several more carriers have since expanded significantly on a regional basis. Most notable are the following:

- Caprock Communications is a long distance provider with a growing regional network in Texas and neighboring states. Caprock expects to complete 3,000 miles of its fiber optic network by year end 1999 and expects to deploy an additional 3,100 miles by year end 2000. The network is based on an OC-48 SONET ring architecture, equipped with DWDM electronics.⁷⁴
- GST Telecom was founded in 1994 to provide retail voice and data services in the western U.S. Its current network includes 2,000 fiber route miles in southern California, Nevada, and Arizona. Construction is underway to extend the network from Seattle to Houston. GST expects to have 6,600 route miles operational by year end 1999. Its buildout combines construction and leasing of fiber networks. For example, GST has agreed to lease and operate fiber owned by the Pasadena Water and Power Department.

Washington Post, Peter S. Goodman, "Daniel F. Akerson Has a National Vision for Nextlink Communications" at F05 (Oct. 18, 1999).

¹⁹⁹⁸ Winstar Press Releases, "Winstar Obtains Dark Fiber Capacity from Metromedia Fiber Network" at 1 (July 29, 1998) www.winstar.com/press/1998/0729981.asp; 1999 Winstar Press Releases, "Winstar Offering Data Services in Top 60 U.S. Markets, Plans to Deploy Data Centers in All Its Central Offices" at 1 (Oct. 28, 1999) www.winstar.com/press/1999/1028991.asp ("Winstar 1999 PR").

Caprock Communications, "Locations/Coverage Areas" <www.caprock.com/loc.html>.

GST Network, "High Capacity and Flawless Performance United" (1999) <www.gst.corp.com/network/upper_frame.html> (network mileage); GST Network Map, "The Network of the Future -- Today" (1999) <www.gstis.com/~gstx/network/body/map.html> (geographic scope).

Pasadena's network will connect GST's switches in Los Angeles and Riverside, California.⁷⁶

• McLeod USA is a long distance provider with a growing regional network in twelve midwest and Rocky Mountain states. McLeod's network grew from 6,300 route miles in September 1998 to 9,400 miles this September. While most this capacity is in Iowa and Illinois, McLeod is extending its regional network from Idaho to Indiana.⁷⁷

Finally, a growing number of carriers lease fiber capacity from the networks of electric and gas utilities. See Besen/Brenner Decl. at 17. As of 1997, these utilities had already deployed 40,000 route miles of fiber and had plans to add 38,000 route miles. Id. Moreover, a significant percentage of these facilities are being or will be leased in the future to long distance providers.

Id. at 17-18. According to a 1997 survey by the United Telecom Council, 19.1% of utilities lease part of their dark fiber networks. Id. Of those responding, 11.5% indicated that they leased these facilities to interexchange carriers; another 14% indicated that they planned to do so by 2000. Id. Such networks further expand the amount of transmission capacity that has become available since the WorldCom/MCI Order.

a. Mass market

The Commission has previously found that the relevant geographic market for domestic long distance is a single national market and that "residential... customers are highly price sensitive and will switch long distance carriers to obtain price reductions and desired features."

WorldCom/MCI Order ¶¶ 30-31, 41. The Commission has identified certain assets and

GST Press Release, "Pasadena Metro Fiber Network 25-Mile Backbone Offers Local Businesses Access to GST's Enhanced Data and Voice Services" (Oct. 19, 1999) www.gstcorp.com/investor/press releases/gen170.html>.

McLeodUSA Press Release, "McLeodUSA Posts Record Third Quarter" at 2 (Oct. 27, 1999) <www.mcleodusa.com/aboutmcleodusa/pressreleasearchive/singlestory.php3?pid =61>.

capabilities that are "important attributes in serving the mass market," including brand recognition, reputation, and local customer base. <u>Id.</u> ¶ 132.

Today, consumers have demonstrated a ready willingness to switch carriers based on price. Indeed, analysts confirm that churn rates in the long-distance industry are high, with some estimates indicating that more than 30% of mass market customers switched long distance carriers within a twelve month period. Analysts also indicate that prices continue to fuel churn, as well as an increased penetration of dial-around services. JDP Report at 2. "Overall usage of dial-around services is [also] up sharply this past year among the heavy-volume segment (from 19% in 1998 to 28% in 1999) and mainstream users (from 15% in 1998 to 23% in 1999)." Id. Consumer acceptance of non-brand services is thus palpable, in their purchases of dial-around services, the sales of pre-paid calling cards, the use of marketing innovations, such as the "Tupperware approach" used by Excel and the use of Internet telephony. See Besen/Brenner Decl. at 33-39.

Notably, a lack of brand name apparently enhances the attractiveness of a dial-around plan. See id. Moreover, emerging carriers often partner with other providers with strong brand names, such as Talk.com and AOL, Qwest and BellSouth, and Williams and SBC. See id. at 34-35. The use

See Implementation of the Subscriber Carrier Selection Changes Provisions of the Telecommunications Act, CC Dkt. No. 94-129, 12 FCC Rcd. 10674, ¶ 11 (1997) ("PIC Change Order"); WorldCom/MCI Order ¶ 41.

J.D. Power & Associates Reports, "Sprint and SNET Top Performers in Residential Long-Distance Customer Satisfaction" <jdpower.com/jdpower/releases/usld072999.htm> at 2 (July 29, 1999) ("JDP Report").

of Internet telephony, as evidenced by the proliferation of companies, 80 has also increased in the past two years as well.

The mass market is also readily reached through telemarketing or direct mail promotions, whether for prescribed service, dial-around or pre-paid calling cards. Customers can easily switch their primary interexchange carriers "by requesting the change directly from his or her local exchange carrier (LEC), or by authorizing the new carrier to request a change on his or her behalf in response to a written or telemarketing solicitation, or, an advertisement." PIC Change Order

¶ 4. Neither MCI WorldCom nor Sprint has long distance calling plans for residential users that contain term commitments. As a result, there are no barriers to mass market customers switching carriers if they are dissatisfied with their current long distance company.

FCC Market Shares. According to FCC reports on domestic long distance market shares, MCI serves 12.6% of total residential access lines; Sprint serves 5.7% of them. 4Q Report, Table 4.1.81 Similarly, the FCC reports that MCI WorldCom has 18.4% of the residential toll revenue, while Sprint has 5.7%. Trends Report, Table 11.5. By comparison, "other" carriers serve 14.5% of the residential access lines, and "others" together account for 17.6% of residential revenues.

4Q Report, Table 4.1; Trends Report, Table 11.5 (Teleglobe alone has 3.3% of the market).

Ease of Entry. As noted, both FCC precedent and the federal merger guidelines recognize the importance of low entry barriers to competition: "A merger is not likely to create or enhance

See, e.g., Internet Telephony Roundup, "Internet Telephony Service Providers" (Mar. 1999) < ctimag.com/articles/itmag/0399/0399roundup.htm> (describing over twenty such providers).

These numbers do not include WorldCom's share, which was "small" and thus not separately measured. 4Q Report at 22 n.12.

market power or to facilitate its exercise, if entry into the market is so easy that market participants, after the merger, either collectively or unilaterally could not profitably maintain a price increase above premerger levels." Merger Guidelines § 3.0. Indeed, evidence of repeated entry during a period of competitive prices makes entry even more likely in response to an attempt to institute monopoly pricing. See Areeda & Hovenkamp, Antitrust Law ¶ 420 n.6. Accordingly, in cases where entry is easy, as here, "the merger raises no antitrust concern and ordinarily requires no further analysis." Merger Guidelines § 3.0.

The lack of entry barriers into the long distance markets is readily demonstrated by recent entry involving Qwest, Global Crossing/Frontier, IXC, Williams and Level 3. See

WorldCom/MCI Order ¶ 23. New entrants such as these "have access to substantial amounts of transmission capacity that is not in the hands of the major carriers, capacity that can be used either by vertically integrated carriers to serve retail customers, or by resellers of that capacity, broadly defined. Moreover, these entrants have already demonstrated their ability to capture significant numbers of customers from the major carriers and there is no sign that this trend is abating."

Besen/Brenner Decl. at 56.

According to the FCC, these carriers (and others) accounted for less than 3% of long distance in 1984 but had grown to 20% in 1997. See 4Q Report at 11. Significantly, as reported to the FCC, their market shares more than doubled over the last four years. See id., Table 3.5. Most importantly, some of these companies are aligning with RBOCs to ensure immediate market share gains by the BOCs once granted interLATA relief under Section 271, as discussed below.⁸²

Qwest is merging with U S West; SBC has acquired a 10% interest in Williams; and BellSouth has both a 10% interest in and a strategic marketing alliance with Qwest.

Indeed, the presence of these companies, inter alia, led the Commission to conclude "that the [MCI WorldCom] merger [would] not likely have anticompetitive effects on domestic long distance services, because of recent and expected, significant increases in the essential input of transmission capacity." WorldCom/MCI Order ¶ 23. As demonstrated, additional companies have entered since the Commission's decision in the WorldCom/MCI proceeding, further increasing available capacity.

BOC Entry. In every Section 271 petition to date, the BOCs have maintained that their entry into long distance will bring a multitude of benefits to the mass market consumer and change the face of the long distance market.⁸³ They posit that entry will allow both BOCs and incumbent IXCs to provide "one-stop" offerings incorporating discounts and other incentives.⁸⁴ The RBOCs argue that their entry, bringing additional capacity, will have a "disciplining effect" on long-distance prices.⁸⁵

The Commission has recognized that the BOCs in fact have particular advantages in the mass markets for telecommunications services. See WorldCom/MCI Order ¶ 33. By definition,

See generally Kahn & Tardiff Aff.; Crandall/Waverman Aff.; Hausman Decl.; MacAvoy Decl.; Affidavit of Michael Raimondi, Application of SBC Communications, Inc. for Provision of In-Region, InterLATA Services in Oklahoma, CC Dkt. No. 97-121 (Apr. 7, 1997); Schmalensee Aff. The BOCs argue that their entry will succeed, inter alia, because of their strong brand name presence. See MacAvoy Decl. at 10 (citing Itamar Simonson, User Preferences For One-Stop Telephone Service Providers: Survey Results in Chicago, Detroit and Grand Rapids LATAs (1995), which showed that 26% of customers would choose their local carrier to provide long distance); Kahn & Tardiff Aff. at 16.

See, e.g., MacAvoy Decl. at 9, 10–13; Kahn & Tardiff Aff. at 35–38; Hausman Decl. at 3–4.

See, e.g., MacAvoy Decl. at 9, 16-19; Kahn & Tardiff Aff. at 14-17; Schmalensee Aff. at 6; Crandall & Waverman Aff. at 45.

they already have established relationships with consumers in their region, and as discussed earlier, having the local customer is the key to gaining the customer for long distance (and other) services. The BOCs also will be able to enter <u>immediately</u>: they have readily at hand the administrative and back office operations necessary to provide long distance to residential and small business customers. ⁸⁶ Indeed, given the BOCs' role in long distance billing and collection and PIC selection for the long distance industry, it is fair to say these companies have been involved in virtually every aspect of the long distance business, other than interLATA transport itself. See Besen/Brenner Decl. at 52-53.

In turn, because the Act requires national rate averaging, once the RBOCs have entered long distance -- whether in-region or out-of-region -- existing long distance carriers will not limit their response to BOC price pressures to only the state in which BOC entry occurs. See 47 U.S.C. § 254(g). If BOC entry in one state is predicted to lower prices for calls originating in that state, the benefits of that effect will be spread across the country. This effect will be felt most keenly in those states with the highest level of overall traffic -- precisely the same states where Section 271 relief is most likely to occur the fastest. The four states of New York, Texas, California, and Florida account for nearly 33% of all originating residential toll traffic nationwide. In light of the BOCs' claims that they will capture up to 30% of the market after entry into long distance, the effect of their imminent entry cannot be underestimated.

As the Besen/Brenner Declaration observes, "it appears that many, if not all, RBOCs have interLATA in-region networks they have been using for official traffic . . ." Decl. at 53. U S West's Sol Trujillo recently stated that "[l]iterally, on the day we receive [FCC] approval, we can start offering . . [a] . . . complete package because we have the capabilities in place." Denver Post, Jennifer Beauprez, "U S WEST to Try to Go Distance, Baby Bell to File Application for Approval" at C-01 (Nov. 4, 1999) <news library.krmediastream.com/cgi-bin/search/dp>.

b. Larger business market

The Commission has previously distinguished the larger business market from the mass market, noting that larger customers typically demand advanced long distance features and greater volumes than residential or small business customers. WorldCom/MCI Order ¶ 26. Larger business customers also "tend to be more informed and sophisticated . . . than other customers and . . . they increasingly exercise their 'buying power' by soliciting competitive bids before procuring telecommunications services."

Further, the FCC has found that these larger business customers have elastic demand for services "and will switch carriers in order to obtain price savings and desired features." <u>First Interexchange Competition Order</u> ¶ 37; <u>see also WorldCom/MCI Order</u> ¶ 65. For such customers, the retail assets and capabilities of a given telecommunications provider "are far less important than [its] price and service factors." <u>AT&T/BT Order</u> ¶ 51. Moreover, to the extent that these larger customers are global in scope, they typically have "multimillion-dollar budgets for purchasing global seamless services and are staffed by in-house experts able aggressively to seek out competing providers." <u>Id.</u> ¶ 51. <u>See generally Besen/Brenner Decl.</u> at 36-43.

Recent Industry Trends. The market for long distance business services has been competitive for years. In 1991 and 1993, the Commission deregulated the medium/large business

Competition in the Interstate Interexchange Marketplace, 6 FCC Rcd. 5880, ¶ 37 (1991) ("First Interexchange Competition Order"); see also SBC/Ameritech Order ¶ 91, Access Charge Reform, CC Dkt. No. 96-262, Fifth Report and Order and Further NPRM ¶¶ 141-142 (Aug. 27, 1999) (deregulating certain ILEC special access services in part because customers for these services were large and sophisticated business customers that "generate significant revenues for the incumbent and are not without bargaining power with respect to the incumbent"). The larger business segment includes large government users as well.

services market on this basis. First Interexchange Competition Order ¶ 36; id., 8 FCC Rcd. 3668, ¶ 21 (1993) ("Second Interexchange Competition Order"). While more difficult to quantify with respect to a domestic large user market segment, ⁸⁹ the Commission has noted that the dramatic influx of supply into the marketplace in recent years, as well as the sophisticated level of large buyers, combine to produce efficient outcomes. See WorldCom/MCl Order ¶¶ 73 n.230, 75.

Entrants. In the WorldCom/MCI Order, the Commission acknowledged that many carriers, including AT&T, C&W, Frontier, IXC, and Qwest "have the capabilities to have a significant impact on competition for larger business customers." Id. ¶ 34. In addition to having the technical expertise to compete for high end customers, several of these carriers, including Qwest, IXC, and Frontier, which have available capacity, also "have the incentive to participate aggressively for [these] customers." Id. ¶¶ 34, 65.

In addition to relying on traditional telecommunications providers for services, these customers also have the option of self-provisioning or turning to integrators or major telecommunications equipment vendors, which are today becoming principal operators of U.S. and global networks. See AT&T/BT Order ¶ 37 n.60. Integrators take the lead in assembling and integrating a package of telecommunications services for a customer, while purchasing the necessary transport capacity from a traditional telecommunications carrier in the wholesale

The only exceptions were analog private line services and the 800 services market. First Interexchange Competition Order ¶¶ 67, 138. Both of those services were later deregulated. Second Interexchange Competition Order ¶ 21; AT&T Non-Dominant Order ¶ 142.

The Commission does not report market share data for this segment.

market. See Besen/Brenner Decl. at 48. Firms currently offering these types of value-added telecommunications services include "computer hardware suppliers like IBM Global Services, Hewlett Packard, Unisys and DEC, and network equipment suppliers like Cisco Systems, Lucent technologies, Nortel and 3Com Corp." Id. (citation omitted). Doctors Besen and Brenner also find that:

[i]n addition, business customers can turn to firms that specialize in systems integration such as EDS, ISSC, Computer Science Corporation, and Perot Systems to help acquire, manage, and integrate relatively basic telecommunications services from carriers. An integrator can manage portions of a firm's telecommunications needs and, in some cases, can substitute their own integration, management, and addition of functionality for what otherwise might be provided by a carrier as part of its service.

ld.

Moreover, the RBOCs, with clear technical expertise to offer high-end business services, have indicated a desire to target these customers. For example, both the SBC/Ameritech merger and the Bell Atlantic/GTE merger proposal are premised on the need to pursue "anchor tenants," or larger business customers out-of-region. See SBC/Ameritech Order ¶ 262; BA/GTE

Application at 7-8. Similarly, Qwest reports, in its recent filing in support of its merger with U S

West, that the proposed merger "will permit the combined company to compete more effectively for the 'national/local customer' -- that is, the multi-location customer that would prefer to buy all its communications services (including its local exchange services) from a single supplier."

Qwest/U S West Reply at 16. The combined Qwest/U S West entity will rely on Qwest's recently completed "state-of-the-art, nationwide, 18,500 mile OC-192 fiber optic, Internet protocol network" to compete in the domestic (as well as international) long distance market. 1d. at 13.

"This network operates at speeds of up to 10 Gigabits per second and reaches 150 cities across the United States. The currently lit portion of the 48-fiber network has sufficient capacity today to

handle all the traffic now carried by AT&T, MCI WorldCom, and Sprint combined." Id. (emphasis added). Moreover, Qwest's existing capacity does not include unused capacity, which would "permit the addition of ten times as many more fibers." Id.; see also id., Att. B, Decl. of Bruce M. Owen at 9-10.

Finally, the World Trade Organization's Basic Telecommunications Services Agreement ("WTO Agreement"), which altered the competitive landscape by taking steps to open international markets, is now effective. See International Action Commission Adopts

International Settlement Rate Benchmarks, News Release at *3 (Aug. 7, 1997). To implement the U.S. commitments under that agreement, the Commission issued rules designed to "make it much easier for foreign carriers to enter into and invest in all U.S. markets for basic telecommunications services." Id. at *3. Since adoption of the WTO Agreement, several foreign carriers, including Teleglobe, Cable & Wireless Optus Ltd. (Australia's number two carrier), and Telstra, have strengthened their presence in the United States larger business services market. 91

Clearly, barriers to entry here are minimal.

See also Backgrounder Fact Sheet -- Next Generation Network, <www.qwest.com/press/ qwest_uswest.html> ("The combined company will take the nation's fastest, most reliable advanced fiber-optic network -- with more bandwidth than the networks of AT&T, Sprint, and MCI WorldCom combined -- and link it directly to 29 million customers.") (emphasis added). In the AT&T Non-Dominant Order, the Commission concluded that the ability of AT&T's competitors to absorb two-thirds of its traffic within twelve months was sufficient to constrain AT&T's pricing behavior. AT&T Non-Dominant Order ¶ 55. Here, a single competitor will have more than sufficient capacity to absorb all of the new WorldCom's traffic and AT&T's immediately.

See, e.g., Excel Communications Hot News, "Teleglobe Opens Greater Boston Office, Plans Further Network Deployment" at 1 (June 16, 1999) <www.excel.com/publicpages/hotnews/boston061699.html>; Total Telecom, Duncan Craig, "Telstra, C&W Optus, AAPT to Compete in Online Purchasing Market" at 1 (Oct. 5, 1999) <www.totaltele.com/view.asp?articleid=24131&pub=tt&categoryid=626>; Telstra

c. Wholesale services

In the <u>WorldCom/MCI Order</u>, opponents argued that the Commission should define a separate wholesale (input) market. <u>WorldCom/MCI Order</u> ¶ 28. The Commission declined to do so, finding that it need not examine inputs beyond transmission capacity because "once a firm has overcome the barrier of deploying a national fiber network, all the other capabilities necessary to provide wholesale services are readily attainable." <u>Id.</u> ⁹² Thus, the Commission determined that it need not analyze wholesale services as a separate and distinct input market. <u>Id.</u>

These findings are equally applicable here. Given the additional amounts of existing and future transmission capacity that has become available since the WorldCom/MCI Order, numerous sources of supply are available to resellers. Many companies that once resold capacity have evolved to self-provisioning, in whole or in part. GTE and Excel are paradigm examples of this evolution.

Further, the new sources with unused transmission capacity and less brand name recognition have significant incentives to provision these services to resellers. See Besen/Brenner Decl. at 25. At the same time, because these firms that are fully capable of providing wholesale services exist, retail carriers with established customer bases and better known brands also have

Annual Report, "Global Alliance and International Investments" at 1 (1998) <annualreport.telstra.com.au/nf long/descr/globinv.html>.

See e.g., Wall Street Journal, "Corporate America Confronts the Meaning of a 'Core' Business," at A1 (Nov. 9, 1999) (describing Williams' wholesale strategy).

See Besen/Brenner Decl. at 25 (carriers with underutilized capacity face lower marginal costs for expanding output; as a result, they have a "strong incentive to seize any opportunity to expand supply and capture a greater share of wholesale sales").

an incentive to provide such services. WorldCom/MCI Order ¶ 70. To act otherwise would cede wholesale revenues to competitors. 94

4. International long distance

As with domestic long distance, recent trends, entry, and capacity increases underscore the competitive state of the international long distance. Overseas market liberalization since the WTO Agreement was implemented in February 1998 has had a dramatic effect on the United States international services market. In many markets, U.S. carriers can now bypass incumbent foreign carriers and terminate U.S.-outbound traffic over owned or leased facilities. This has had a marked effect on end user rates and demand in the United States. Among other things, the number of international calls made from the United States has ramped up from 200 million in 1980 to 4.2 billion in 1997 -- producing roughly \$15 billion in revenues. Trends in Telephone Service at 7-1, Table 7.1 (Sept. 1999). At the same time, the price of the average international toll call has declined 50% and the number of providers has risen to more than 350. <u>Id.</u> at 7-1, Table 7.4. ⁹⁵

These reductions are due in material part to the exponential growth of international transport capacity, which has exploded since the WTO Agreement took effect. 96 Specifically,

WorldCom/MCI Order ¶ 70 n.223 (confirming that the "provision of wholesale capacity provides a significant source of revenue for long distance carriers" and that "[a]ccording to the Yankee Group, the provision of wholesale services has been one of the fastest growing revenue sources for long distance carriers over the last four years.").

Fifty-four of those are facilities based, in that they own or lease their own lines. <u>Trends</u> <u>Report</u>, Table 7.4.

In the WTO Agreement, most of the United States' major trading partners committed to permit unrestricted cable landing access. The Commission's efforts to lower accounting rates have helped measurably to bring competitive prices to U.S. consumers.